

INSTRUCTION MANUAL

ORDER NO. 262

1/4-wave, 2-meter, mobile,
magnetic mount w/coax

PN 800854

General Description

The "Magna Topper" is a maximum performance, semipermanent mobile antenna. A 25 pound pull alnico base magnet holds the antenna securely to virtually any ferrous metal surface at speeds in excess of 80 mph. The cutting chart shows the user how to cut the antenna to any desired length for operation on the 2-meter band. Its power capability is 150 watts.

Installation

() Unpack the antenna from box and familiarize yourself with the installation procedure and illustrations contained in this manual.

() Screw the whip and whip fitting on the top of the base mount securely as shown in Figure 1.

() The frequency on which you intend to operate will determine what the length of the whip should be. Refer to cutting chart and Figure 1 for aid in determining the proper length. Cut the whip one inch longer than the length specified in the cutting chart and insert the whip into fitting one inch. See Figure 1. *Be sure to cut from the lower end of the antenna.*

() Loosen the Allen set screw and remove the whip from the whip fitting.

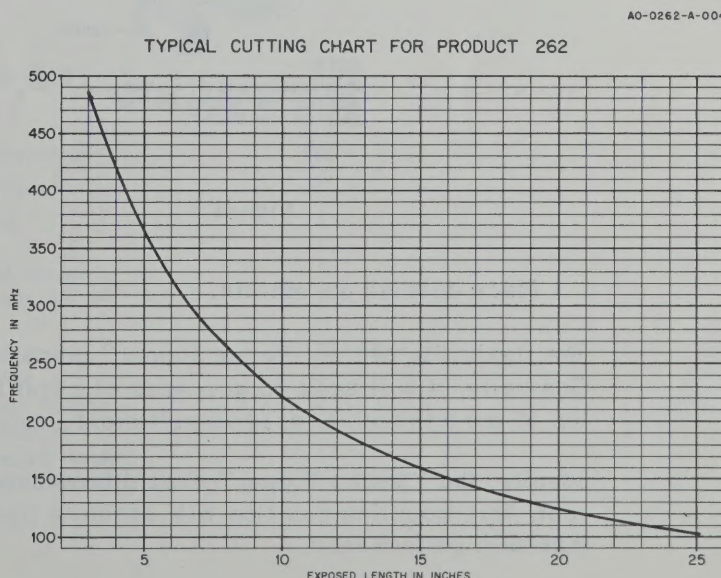
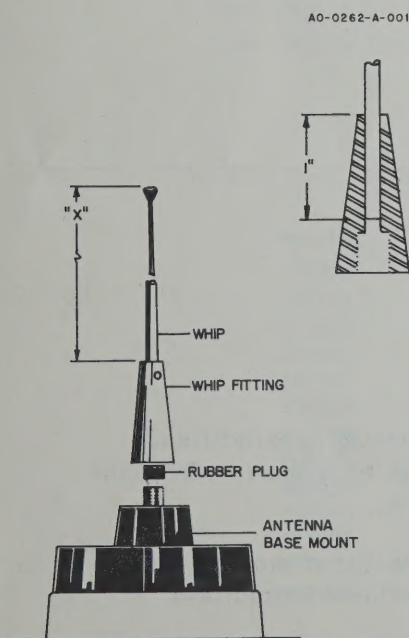


Figure 1

Cutting Chart

() Use a grinder to cut the whip to the proper length. Grind a groove completely around the whip at the desired cutting point and break off excess length. Refer to Figure 2.

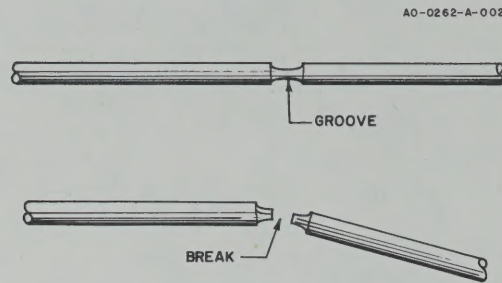


Figure 2

- () Insert the whip one inch into the whip fitting. *No more than one inch.*
- () Uncoil the feedline.
- () Remove the "keeper" from base of the magnet. See Figure 3.

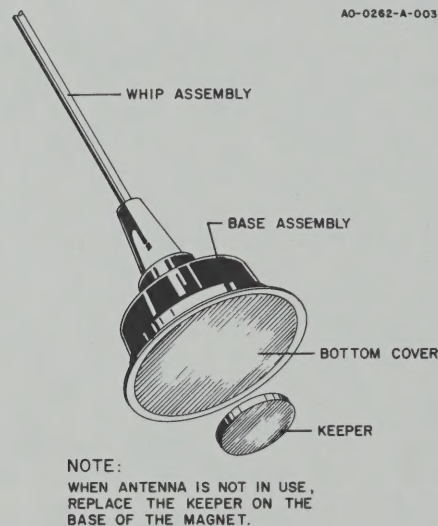


Figure 3

- () Place antenna on vehicle.

The flexibility of the "Magna Topper" gives it many mounting possibilities. Generally, it will work on any mass of metal large enough to support it. Even the top of the transceiver case is sufficient in many instances.

Ideally, the "Magna Topper" should be mounted in the center of the vehicle's roof. This mounting position will assure a true omnidirectional pattern and maximum performance.

In some instances, mounting the "Magna Topper" on the vehicle's trunk deck may be desirable. In this case, the feedline can be routed through the trunk compartment, under the back seat, and floor covering to the transceiver.

- () Route the feedline to the transceiver via the shortest possible route. *Avoid having a long length of feedline running outside the vehicle.*
- () Screw the coax connector to the antenna terminal on the transceiver.
- () Operate.

IMPORTANT: For maximum utilization of the antenna's potential, ground the transceiver to the vehicle.

Whenever the "Magna Topper" is not in place on a vehicle or other metal surface, replace the "keeper" on the base of the magnet. This must be done to retain the full magnetic strength over a long period of time.

If the "Magna Topper" has been exposed to rain or snow, remove it from its mount and wipe the bottom of the base dry to insure peak performance and lowest SWR.

CAUTION

This magnet has the holding strength of 25 mph and can hold at speeds in excess of 80 mph. It offers reliable holding power under normal conditions but some conditions may exceed its ability to hold.

Consider the factors that might detract from the antenna's efficiency:

It cannot be used on vinyl roofs. It must be set upon a perfectly flat surface.

Variations in paint thicknesses and properties of metal to which it is placed can reduce its effective holding power. The surface must be perfectly "clean, oil-free, and dry".

A "wall of wind" precedes passing vehicles 2 to 4 times the speed of the vehicle. The suction produced by passing vehicles tend to pull the opposite vehicle toward it. This is especially true of trailers or large trucks.

Similar conditions are turbulence caused by overpasses and other vehicles meeting under bridges or overpasses, etc. Rain forcing its way under the mount can reduce the effective holding power.

Parts List

Part No.	Description	Qty
175083	magnetic base	1
281107	whip fitting	1
320028	whip	1
351631	magnet and keeper	1
351787	Allen wrench, #8 set	1
470024	O-ring	1
531579	screw, #8 cup set	1
607365	RG58/U coax	1
652439	PL-259 insert adapter	1
657565	PL-259 connector	1
812957	PL-259 adapter washer	1
817730	rubber plug (without hole)	1
863758	base cover	1

90-DAY LIMITED WARRANTY

Hy-Gain Electronics Corporation warrants each new product manufactured to be free from defects in material and workmanship and agrees to remedy any such defect or to furnish a new part in exchange for any part of any unit which under normal installation, use, and service, discloses such defect within the ninety-day term of this warranty, dated from the date of purchase by the original owner. This warranty applies only to the original purchaser.

This warranty does not extend to any of our products which have been subjected to mis-use, neglect, accident, incorrect wiring not our own, improper installation, or to use in violation of instructions furnished by us. Nor does it extend to units which have been repaired or altered outside of our factory, nor to accessories used therewith not of our own manufacture.

Upon receipt of equipment, the purchaser is responsible for checking the contents for damage. Any shipping damage should be referred to the carrier.

Hy-Gain Electronics Corporation reserves the right to make any changes deemed necessary or desirable without advance notice or incurring any obligation to make like changes in units previously manufactured or sold.

This warranty does not cover transportation costs that may be incurred. Hy-Gain Electronics Corporation's sole liability is the remedy of any defect for the ninety-day period of this warranty. Hy-Gain Electronics Corporation is not responsible for

personal injury or property damage resulting from improper or careless installation, or usage not intended by the manufacturer.

No person is authorized to assume for us any other liability in connection with the sale of our products.

All warranties are void and terminated one year after the last unit of its type and design has been manufactured by us.

All claims of defect or shortage should be addressed to:

Warranty Service Department
Hy-Gain Electronics Corporation
4900 Superior Ave.
Lincoln, Nebraska 68505

You must furnish model number, date, place, and proof of purchase, such as a copy of the sales receipt to establish warranty. Your letter should include all pertinent details along with part or item numbers involved. Do not return anything until requested to do so. No warranty card is furnished; you must supply the above information.

Any returned items must have prior authorization. Unexpected returns are greatly delayed in handling. These delays can be avoided by writing in advance and furnishing the necessary information.